

Crotty discloses a cosmetic product that is an adhesive strip to remove keratotic plugs and to deliver active ingredients to the skin. *See, e.g.*, Crotty, col. 2, lines 40-42. Crotty also teaches that a wetting agent, preferably water, is needed for the delivery of active ingredients to the skin. *See, e.g.*, Crotty, col. 5, lines 65 to col. 6, line 11.

Lansky discloses an oral or topical phytoestrogen supplement prepared from pomegranate material, *e.g.*, pomegranate seeds, and schizandra berries and Chinese asparagus root. *See e.g.*, Lansky, col. 2, lines 49-56, and col. 3, lines 50-57. Lansky discloses an ointment prepared by pressing pomegranate seed to obtain oil and mixing the oil with coconut milk to form a mixture. *See e.g.*, Lansky, col. 3, lines 7-11. Lansky also discloses that the oral supplement or ointment may be administered to relieve various symptoms in menopausal women or postmenopausal women. *See e.g.*, Lansky, col. 3, lines 50-56.

Okaya discloses aqueous external skin preparations that contains Mn-SOD and/or modified Mn-SOD with improved reducing potential against skin-roughening by maintaining enzyme activity (*See, e.g.*, Okaya, column 1, line 67 to column 2, line 3).

Crotty, as acknowledged by the Examiner does not disclose a composition that comprises magnesium ascorbate or fruit extract from pomegranate. The Examiner, however, alleges that Lansky teaches pomegranate extracts in topical compositions and that Okaya teaches external skin preparations comprising an aqueous preparation made of manganese containing SOD and a physiological acceptable manganese salt. The Examiner then alleges that the combination of references renders the claims obvious. Applicant respectfully traverses.

The rejected claims are directed to (a) a fruit extract from pomegranate, (b) a hydrophobic moisturizing agent, (c) a hydrophilic moisturizing agent, (d) a mono- or poly-hydroxy acid (claim 34) in combination with manganese ascorbate (claim 1); or a manganese compound, a copper compound, or a selenium compound in an orally administered formulation (claim 33); or a transition metal component (claim 35). Claims 22 and 33 are specifically directed to an orally administered composition. As acknowledged by the Examiner, Crotty and Lansky fail to disclose a composition comprising manganese ascorbate. Okaya, however, fails to remedy the deficiencies in Crotty and Lansky. Okaya merely discloses that aqueous compositions comprising Mn-SOD or modified Mn-SOD are more stable if the solution also contains a water soluble manganese salt (*See, e.g.*, Okaya, column 2, lines 4-22). There is, however, absolutely no disclosure or suggestion that including a manganese salt, much less the specific manganese salt manganese ascorbate, in a dermatological agent would do anything other than stabilize Mn-SOD or modified Mn-SOD

also present in the solution. There is no disclosure or suggestion, however, that the specific manganese salt, manganese ascorbate, would be effective in treating dermatological conditions since it is a co-factor for SOD.

Applicant respectfully submits that the prior amendment of "a manganese component" in claim 1 to specifically recite "manganese ascorbate" should suffice to distinguish the manganese-SOD and stabilizing manganese salts (*i.e.*, manganese chloride tetrahydrate and manganese acetate tetrahydrate) of Okaya from the instantly claimed invention. In any event, Applicant respectfully asserts that the manganese ascorbate performs a dual functionality in the composition recited in currently pending claim 1 that the stabilizing manganese salts of Okaya do not possess. Manganese ascorbate functions both as a manganese source, which is the co-factor used by the SOD in mitochondria (*see* the instant specification at page 16, lines 5-6), while the ascorbate salt functions additionally as an antioxidant in the composition. Applicant respectfully submits that neither the chloride nor the acetate salts of manganese, as taught by Okaya, performs this additional antioxidant function. Applicant also submits that ascorbate is the salt of ascorbic acid, *i.e.*, Vitamin C, which has numerous health benefits that salts of acetic and hydrochloric acid do not have.

Moreover, none of the references cited by the Examiner disclose or suggest combining each of a hydrophobic moisturizing agent, a hydrophilic moisturizing agent, and a mono- or poly-hydroxy acid in a single composition with the other components of the formulation (*See, e.g.*, Specification, page 15, lines 19-25). Indeed, Lansky discloses that the composition disclosed therein can contain "a pharmaceutically appropriate carrier such as beeswax and cocoa butter (hydrophobic moisturizers) *or, alternatively* and preferably, hydrophilic lanolin. (*See, e.g.*, Lansky, column 3, lines 19-21, emphasis added). The acidic component moisturizer functions by removing the dead or dying skin cells, enabling the skin to better absorb moisture from the atmosphere (*See e.g.*, Specification, page 15, lines 19-25). The hydrophobic agents prevent the loss of water from the skin (*See e.g.*, Specification, page 15, lines 19-25). The hydrophilic agents moisturize the skin by absorbing moisture or facilitating hydration of the skin (*See e.g.*, Specification, page 15, lines 19-25). The combination of a hydrophilic moisturizer, a hydrophobic moisturizer, and a mono- or poly-hydroxy acid is an important feature of the invention. Using the combination of all three components to treat a dermatological disorder is unexpectedly superior than using either alone due to the synergistic effect. None of the references cited by the Examiner disclose or suggest using all three of a hydrophilic moisturizer, a hydrophobic moisturizer, and a mono- or poly-hydroxy acid, as presently claimed, or the unexpected effects of the combination.

Clearly, the combination of Crotty, Lansky, and Okaya does not disclose the *orally* administered formulations disclosed in claim 22 and independent claim 33. Crotty and Okaya are each directed to *topically* applied compositions. Applicant respectfully submits that one of ordinary skill in the art would not have been motivated to combine Crotty (directed to adhesive strips) and Okaya (directed to external skin preparations) with Lansky to render obvious *oral* compositions, such as recited in claim 22 and independent claim 33. Clearly, an adhesive strip as disclosed in Crotty would not be combined with an *oral formulation* as disclosed in Lansky. *See M.P.E.P. § 2143.01.* Further, Okaya only discloses external skin preparations and, accordingly, cannot be combined with Lansky to disclose or suggest the *oral compositions* of claim 22 and independent claim 33. Accordingly, claims 22 and 33 directed to oral compositions are not rendered obvious by the cited references.

Applicant respectfully submits that the Examiner is impermissibly using hindsight to reconstruct Applicants invention. The Examiner is picking and choosing the specific components of Applicant's invention from a broad disclosure of components, in several references, some directed to oral administration and others directed to topical administration, with no motivation to choose the claimed components, to arrive at Applicant's invention. Hindsight cannot be used to reject a claim as obvious. *In re Sernaker*, 702 F.2d 989, 994 (Fed. Cir. 1983); *In re Rinehart*, 531 F.2d 1048 (CCPA 1976); *In re Imperato*, 486 F.2d 585 (CCPA 1973); *In re Adams*, 356 F.2d 998 (CCPA 1966). Consequently, it is legally improper to select from the prior art the separate components of the inventor's combination, using the blueprint supplied by the inventor. *C.R. Bard Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1352 (Fed. Cir. 1998) citing *Fromson v. Advance Offset Plate, Inc.*, 755 F.2d 1549, 1556 (Fed. Cir. 1985) (holding the prior art must suggest to one of ordinary skill in the art the desirability of the claimed combination).

The Federal Circuit has suggested that "the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or modification to combine prior art references." *Id.* This is because "when prior art references require selective combination by the court to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself." *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1142 (Fed. Cir. 1985).

In the present case, there is absolutely no suggestion in the prior art to combine each of the components, and in particular, (a) a hydrophobic moisturizing agent, (b) a hydrophilic moisturizing agent, (c) a mono- or poly-hydroxy acid and a fruit extract from

pomegranate (claim 34) or to combine these with manganese ascorbate (claim 1); or a manganese compound, a copper compound, or a selenium compound in an orally administered formulation (claim 33); or a transition metal component (claim 35).

For the above reasons, Applicant respectfully requests that the rejection of claims 1, 2, 4-9, 11-23, 25-27, and 30-35 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Claims 28 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Crotty in view of Lansky and further in view of U.S. Patent No. 5,759,555 to Moy (“Moy”) for the reasons set forth on page 5-6 of the Office Action. Applicant respectfully traverses the rejection.

Moy discloses methods for ameliorating stretch marks and keratoses by applying to the affected skin a dermatological composition comprising unsaponifiable lipids extracted from avacodo seeds (*See, e.g.*, column 2, lines 55-63).

The Examiner acknowledges that Crotty and Lansky fail to disclose copper sebacate and cites Moy as disclosing copper sebacate. Applicant respectfully submits that Moy does not disclose using copper sebacate. Rather Moy discloses that the metal chelating agent is zinc or copper CHELAZOME amino acid chelate (*See, e.g.*, Moy, column 7, lines 19-22). There is, however, no disclosure or suggestion to include copper sebacate in a dermatological agent.

Moreover, there is also no suggestion in Crotty, Lansky, or Moy to use all three of a hydrophilic moisturizer, a hydrophobic moisturizer, and a mono- or poly-hydroxy acid in a composition that further comprises copper sebacate and a fruit extract from pomegranate, as presently recited in claim 28, or the unexpected effects of the combination, as discussed above. Applicant respectfully submits that the Examiner is again impermissibly using hindsight to select from the prior art the separate components of the inventor's combination using the blueprint supplied by the inventor to arrive at Applicant's invention.

For the above reasons, Applicant respectfully requests that the rejection of claim 28 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Claims 29 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Crotty in view of Lansky and further in view of U.S. Patent No. 5,804,167 to Schonrock (“Schonrock”) for the reasons set forth on page 6-7 of the Office Action. Applicant respectfully traverses the rejection.

Schonrock discloses emulsifier free finely dispersed formulations of the water in oil type (*See, e.g.*, Schonrock, column 2, lines 9-11).

The Examiner acknowledges that Crotty and Lansky fail to disclose selenium complexed with an amino acid and cites Schonrock for disclosing selenium complexed with an amino acid. Again, Applicant respectfully submits that the mere disclosure of a composition that includes selenium complexed with an amino acid does not render claim 29 obvious. There is absolutely no disclosure or suggestion in Crotty, Lansky, or Schonrock to combine each of a hydrophobic moisturizing agent, a hydrophilic moisturizing agent, and a mono- or poly-hydroxy acid (or the unexpected advantages of such a combination, discussed above) with a fruit extract from pomegranate, much less with selenium complexed with an amino acid, as recited in claim 29. Again, Applicant respectfully submits that the Examiner is impermissibly using hindsight to select from the prior art the separate components of the inventor's combination using the blueprint supplied by the inventor to arrive at Applicant's invention.

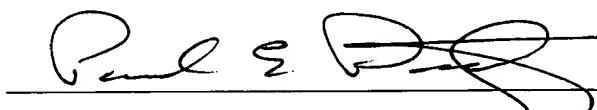
For the above reasons, Applicant respectfully requests that the rejection of claim 28 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Indeed, all claims are believed to be in condition for allowance. Should the Examiner disagree, Applicant respectfully invites the Examiner to contact the undersigned attorneys for Applicant to arrange for an interview in an effort to expedite the prosecution of this matter.

No fee of is believed to be due for this submission. Should any fees be required, however, please charge the required fees to Pennie & Edmonds LLP Deposit Account No. 16-1150.

Respectfully submitted,

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Enclosures